

The influence of some amino acids on the respiration of erythrocyte nuclei. S. M. Bychko¹. Arch. biof. (U.S.S.R.) 41, No. 2, 50-64 (1937). Chem. Zentr., 1938, II, 1266. - Alanine, leucine, histidine and tryptophan repressed the respiration of the erythrocytes of pigeons in serum. This phenomenon is explained as an adsorption of the amino acids on the blood corpuscles. M. G. M.

SEARCHED		SERIALIZED		INDEXED		FILED	
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APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, Sergey Mikhaylovich

"The Adequacy of Monocarboxylic α -Aminoacids Bearing a Second Acidic Group --
Cysteic Acid and Phosphoserine -- in Amino Nitrogen Transfer, VIII, Communication
on the Formation and Breakdown of Amino Acids by Intermolecular Transfer of Amino Groups,"
Biokhim. Vol. 4, No. 2, 1939.

Lab. for Metabolic Research, Dept. of Physiol. Chemistry (VLEM), Moscow.

P.C.

12A

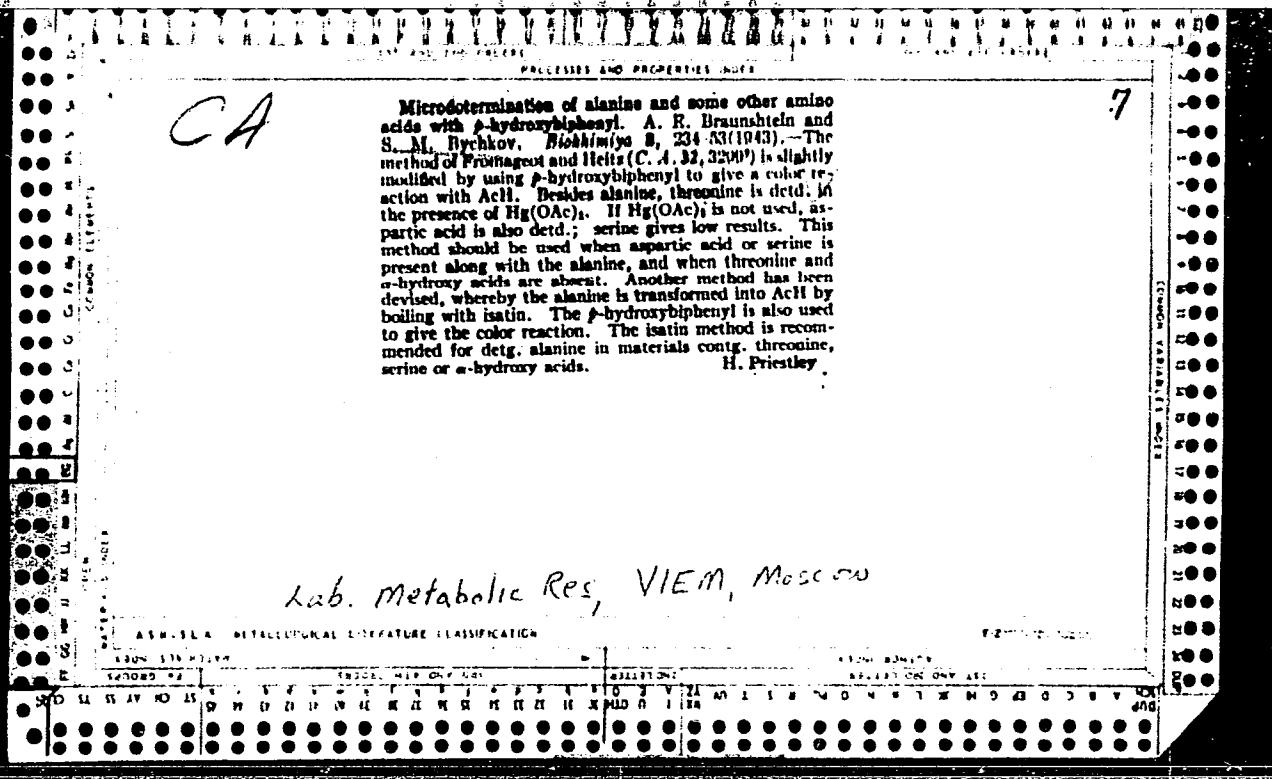
Formation and breakdown of amino acids by inter-molecular transfer of amino groups. XIV. A cell-free enzymic model of *L*-amino acid dehydrogenase ("*L*-deaminase"). A. E. Braunschtein and S. M. Bychikov or methylene blue. **XV. Influence of specific enzyme Biokhimiya**, 5, 261-70(1940); cf. *C. A.* 34, 5885c. **Poisons and other chemical agents on the activity of the oxidative deamination of monocarboxylic *L*-amino glutamic aminopherase.** I. D. Vyshpan. *Bid.* 271 only in the presence of liver or kidney tissue; all previous by the following reagents (concn. in moles): Quinone attempts to obtain the hypothetical enzyme "*L*-deaminase" (0.01), KCN (0.01), glutathione (0.002-0.004), cations in the form of a purified prepn., or cell-free ext., had failed of Ca, Ba, Sr (0.02), Hg and Ag (0.0001). Reagents On examg. the properties of "*L*-deaminase," the authors which are relatively harmless are narcotics, NaF, monoconclude that the oxidative deamination of monocarboxylicido- and monobromogluconic acids, arsenite, arsenate and *L*-amino acids is in all probability an indirect one, namely, scelence; the union Cl, Br, I, OAc, NO, CO, SO₄ (0.1) through transamination with dicarboxylic α -keto acids, succinic acid (0.01), H,S, cysteine, fettosine, semicarbazide and subsequent deamination of the dicarboxylic amide, PhNHNH₂ and NH₄OH. **XVI. Transamination action of 2 enzyme systems, glutamic or aspartic amino-281-7.** This is the first of a series of studies relating to aperase, and glutamic or aspartic dehydrogenase, together the process of transamination under various pathol. conditions with the necessary coenzymes, and amino groups and H₂ions. In Bi avitaminosis of pigeons, there is a weakening with the formation of NH₃ under aerobic conditions hasthrough transamination. General starvation is not been effected in a cell-free soln., with the aid of glutamic responsible for the decrease in the transamination rate, since aminopherase and dehydrogenase, cozymase, α -keto-the muscle tissue of starving pigeons is as effective as the glutamic acid and an antiodizable H carrier (favoecyaninetissue of normal pigeons. H. Priestley

Lab. for Metabolic Research, Dept. of Physiological Chem. VIM, Moscow

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

EDITION ESTABLISHED

EDITION ESTABLISHED



"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, S. N.

"The Nature of the Mechanism of the Spreading Factor," ZhMEI, 12, 37-39, 1941

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, S. M.

USSR/Medicine - Erythrocytes
Medicine - Hyaluronic Acid
Sep 1947

"Effect of Hyaluronic Acid on the Speed of Precipi-
tation of Erythrocytes," S. M. Bychkov, Section on
Microbiology, Institute of Microbiology, Section on
and Infectious Diseases, Academy of Epidemiology,
Institute of Medicine, Moscow, 3 pp

"Byulleten' Eksperimental'noy Biologii i Meditsiny"
Vol XXIV, No 3

Graphs and data on the speed of precipitation of
erythrocytes in human, rabbit and mouse blood. Up
to the present time a rapid means of precipitating
erythrocytes, a function necessary in some patho-

23T81
USSR/Medicine - Erythrocytes (Contd) Sep 1947
Medicine - Hyaluronic Acid

logical processes, has not been discovered. The
authors describe their experiments using hyaluronic
acid on various bloods (human, rabbit, mouse and
chicken). Submitted 18 Apr 1947.

PA 23T81

23T81

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, S. M.

PA 41T63

USSR/Medicine - Biology

Medicine - Acid, Hyaluronic

Jan/Feb 1948

"Hyaluronic Acid and Its Physiological Characteristics," S. M. Bychkov, Moscow, 18 pp

"Uspekhi Sovremen Biol" Vol XIV, No 1

Hexosamine and uronic acid are very widely produced in living matter. Author discusses only one muco-polysaccharide - hyaluronic acid. This acid, according to Meyer's classification (1938), belongs to a series of acid mucopolysaccharides which contain uronic acid. Hyaluronic acid appears to be the most widely distributed of this class of acids, and author briefly describes its physiological significance.

LC

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APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

CA

116

Relation between the hexosamine content of blood serum and the sedimentation rate of erythrocytes in gas gangrene. S. M. Bychkov (1st Moscow Lenin Med. Inst. T. Arkh. Patol. "II," No. 5, 10-23(1949).—In exptl. gas gangrene in rabbits induced by injection of *B. perfringens* there occurs a sharp increase of the hexosamine level in the blood serum (up to 0.5 mg./ml.) which is followed linearly by the erythrocyte sedimentation rate.
G. M. Kosolapoff

+ Hd. Chair of Biochem.

BYCHKOV, S. M.

PA 47/49T55

USSR/Medicine - Chondroitinsulfuric Acid

Medicine - Heparin, Effect

Mar/Apr 49

"Chondroitinsulfuric Acid and Heparin," S. M. Bychkov, Moscow, 16 pp

"Uspekhi Sovrem Biol" Vol XXVII, No 2

Discusses under: (1) chondroitinsulfuric acid, (2) heparin, (3) mechanisms by which heparin inhibits blood circulation, (4) sulfuric acid ethers of mucopolysaccharides and metachromism, and problem of the origin of heparin in the body, (5) biologic significance of sulfuric acid ethers of mucopoly-

USSR/Medicine - Chondroitinsulfuric Acid (Contd) Mar/Apr 49

saccharides, and (6) sulfuric acid ethers of mucopolysaccharides in pathology.

47/49T55

47/49T55

BYCHKOV, S. M.

USSR/Chemistry - Hyaluronic Acid May/Jun 49

Medicine - Biochemistry

"New Data on Hyaluronic Acid May/Jun 49

S. M. Bychkov, 5 pp

"Uspekhi Sovrem Biol" Vol XXVII, No 3

Reviews studies of the biological importance
of hyaluronic acid -- hyaluronidase system,
physical and chemical properties of the acid,
properties of potassium hyaluronate, and structure
of thin films of the acid by electron microscope,
effect of hydrolytic products of hyaluronic acid
on production of hyaluronidase by Cl. Welchii,

57/49T17

USSR/Chemistry - Hyaluronic Acid

(Contd)

May/Jun 49

and streptococcus C-7, correlation between the
presence of hyaluronidase and the density of
sperm and semen and the role of hyaluronidase
in fertilization in mammals.

57/49T17

57/49T17

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, S.M.

Mucopolysaccharides, mucoproteins and their part in animal physiology
and pathology. Uspekhi Biol. Khim. 1, 456-72 '50.
(CA 47 no.14:7069 '53) (MLRA 5:8)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

CA

IIA

Complex formation of hyaluronic and chondroitinsulfuric acids with procollagen. S. M. Bychkov (1st Moscow Med. Inst.). *Doklady Akad. Nauk S.S.R.* 75, 83-6(1950).—Addn. of solns. of hyaluronic or chondroitinsulfuric acids to rat skin procollagen in citrate buffer at pH 4.1 gave a formation of threadlike ppts. of complexes between these substances; after standing overnight in the cold after addn. of 2% AcOH the products were dried. Analyses show definite stoichiometric formulation, contg. 11-11.45% N for the hyaluronic complex and 12.3-12.5% N for the chondroitin complex. Both are sol. in *N* NaOH, insol. in H₂O, 2% AcOH, or 2 *N* HCl. The rather const. level of hexoseamine N in the rat epidermis suggests the existence *in vivo* of complexes of the type described above. G. M. K.

116

Gastric mucopolysaccharides and mucoproteins. S. M.
Bychkov. *Uspekhi Sovremennoi Biol.* 31, 302-75(1951).
A review of etiology, pathogenesis, and significance in diagnosis and in therapy. 83 references. Julian F. Smith

CA

16

Content of mucopolysaccharides and mucoproteins in tissues in experimental infection. S. M. Bychikov, (1st Moscow Med. Inst.). *Doklady Akad. Nauk S.S.R.* 77, 649-52(1951).—Rabbits infected through a ragged wound with *Bacillus perfringens* show an increase of hexosamines in the blood serum. The normal concn. in the liver is 0.8-1.17% of total N, that of lungs 0.49-0.71 and that of skeletal muscle 0.07-0.16%; infection, however, lowers the total hexosamine concn. very significantly and in the muscle only 0.06-0.1% of total N is in the hexosamine state; a similar drop is found in the liver, although the total N rises. In the lungs no significant change is detected. Hence, the changes taking place in the muscle and liver are opposite to those occurring in the blood. The results may be caused, in part, by the bacterial enzymes that facilitate degradation of mucopolysaccharides in the muscle, but the total explanation is still lacking. G. M. K.

1951

1951

Biological Chemistry
1A

Content of mucopolysaccharides and mucoproteins in cell nuclei. S. M. Bychkov, I. B. Zhurkina, A. I. Kharlamova, and V. A. Pulinov (Inst. Moscow Med. Inst.) *Doklady Akad. Nauk S.S.R.* **78**, 90-101 (1951). The data of total N, hexosamine N, and their ratio in tissues and cell nuclei in human liver, human spleen, ox liver, calf thyroid, and rat sarcoma showed that mucopolysaccharides and mucoproteins are components of cell nuclei. The estim. of the fraction of hexosamine contg. materials belonging to each category cannot be made as yet. The highest ratio of hexosamine N to total N was found in the sarcoma specimen. Usually, the nuclei from liver show a ratio of hexosamine N to total N that is lower than in entire tissue. In nuclei the ratio is about 0.0018-0.008; in sarcoma it is 0.047. G. M. Kosolapoff

Effect of ultrasound waves on hyaluronic and chondroitin-sulfuric acids. I. E. El'piner and S. M. Lychkov. *Doklady Akad. Nauk S.S.R.*, 82, 123 (1952). Subjection of aq. solns. of hyaluronic acid (I) and chondroitin-sulfuric acid (II) (0.1% and 0.4%, resp.) to ultrasound (50,000 cycles per sec.) caused steady and rapid decline of viscosity of solns. of I and a rather lesser decline in II. The intensity of color test for *N*-acetylhexosamine increases with exposure. Both solns. show a steadily increasing reducing power (up to 70% in comparison with hydrolytic cleavage of I and 20% of II). Possibly the cleavage occurs between elements of *N*-acetylhexosamines and glucuronic acid.

G. M. Kosolapoff

Lab. of Biochemistry of Cancer, AMS, USSR

BYCHKOV, S. M.

"The Role of Various Mucopolysaccharides and Mucoproteins in the Erythrocyte Sedimentation Reaction." Dr Biol Sci, First Moscow Medical Inst, Moscow, 1953.
(RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556 24 Jun 55

Bychkov S. M.

Mucopolysaccharides and mucoproteins of the eye. S.
M. Bychkov. *Uspekhi Sovremennoj Biol.* 41, 26-39(1956).
A review of world literature on the subject with the con-
clusion that mucopolysaccharides and mucoproteins of the
eye in particular, and as a group of substances in general, are
of great physiological importance. The eye, as an experi-
mental tool, offers a means of study of the basic structure of
connective tissue as well as of the role of polysaccharides in
the processes of growth and regeneration of tissues.

I. A. Stekol

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHEKOV, S.M. (Moskva)

Specific mucooids of human and animal organisms. Usp. sovr. biol.
66 no.1:3-18 J1-4g '57. (MIRA 10:10)
(MUCOIDS)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

EXCERPTA MEDICA Sec 2 Vol 12/5 Physiology May 59

1496. INTERACTION OF CHONDROMUCOID AND PROCOLLAGEN (Russian text) -
Bychkov S. M. and Fomina W. A. Lab. of the Min. of Hlth of the
USSR, Moscow - VOPR. MED. KHMII 1958, 4/1 (59-64) Graphs 2

Chondromucoid and procollagen in acid medium form a salt-like complex which is
insoluble in water but dissolves slowly in alkali and in the presence of Ca ions.
Procollagen combines with the polysaccharide and probably with the protein of the
chondromucoid, although the tyrosine content of the complex is low.

Leicester - San Francisco, Calif. (II, 6, 19*)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

Borchov S.
OREKHOVICH, V.N.; BYCHKOV, S.M.; DEBOV, S.S.; MARDASHEV, S.R.; SEVERIN, S.Ye.

Second International Congress on Clinical Chemistry. Vest.AMN SSSR
13 no.2:62-74 '58. (MIRA 11:3)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, S.M.; FOMINA, V.A.

Study on tendon mucoids. Vop.med.khim. 6 no.5:528-532 S-0 '60.

1. Laboratory of the Ministry of Health, U.S.S.R., Moscow.
(MUCIN) (TENDONS)

BYCHKOV, S.M. (Moskva)

Recent data on neuraminic acid and sialic acid and their biological significance. Usp. sovr. biol. 49 no.1:3-18 Ja-F '60.

(MIRA 14:5)

(NEURAMINIC ACID)

(SIALIC ACIDS)

BYCHKOV, S.M.

Extraction and fractionation of acid mucopolysaccharide. Vop.
med. khim. 7 no.2:179-186 Mr-Ap '61. (MIRA 14:6)

1. Laboratory of the Ministry of Health of the U.S.S.R., Moscow.
(POLYSACCHARIDES)

BYCHKOV, S.M.

Isolation of chondroitinsulfate from hyaline cartilage.
Vop. med. khim. 7 no.4:396-401 Jl-Ag '61. (MIRA 15:3)

1. Laboratory of the Ministry of Public Health of the U.S.S.R.
(CHONDROITINSULFURIC ACID)
(CARTILAGE)

BYCHKOV, S.M. (Moskva)

Recent data on group-specific mucoids in man. Vop. med. khim. 8
no.4:339-353 31-Aug '62. (MIRA 17:11)

BYCHKOV, S.M. (Moskva)

Complexes of polysaccharide acids with proteins. Usp. sovr.
biol. 56 no. 3:305-322 '63.
(MIRA 17:5)

BYCHKOV, S.M.; KHAZANOVA, A.I.

Interaction of streptomycin with chondroitin sulfate and
chondromucoprotein. Vop. med. khim. 9 no.1:48-56 Ja-F '63.
(MIRA 17:6)
1. Laboratoriya Ministerstva zdravookhraneniya SSSR, Moskva.

BYCHKOV, S.M., KHAZANOV, A.I.

Interaction of chondromucoprotein and chondroitinsulfate A
with hexamminocobalt chloride. Biokhimiia 30 no.1:141-147
Ja.-F '65. (MIRA 18:6)

1. Laboratoriya Ministerstva zdravookhraneniya SSSR, Moskva.

BYCHKOV, S.M.; KHAZANOVA, A.I.

Interaction of chondromucoprotein and chondroit-
insulfate A with polymyxin M. Vop.med.khim. 11 no.5;
11-17 S-0 '65. (MIRA 1981)

1. Laboratoriya Ministerstva zdravookhraneniya SSSR, Moskva.
Submitted April 9, 1964.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BACHKOV, S.P.

All-Union conference on the economy of electric power in textile and
light industry enterprises. From. energ. 15 no.11:53-54 N '60.
(MIRA 14:9)
(Electric power)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, S.P.

Saving of electric power in the textile industry. Prom. energ.
15 no.7:4-7 Jl '60. (MIRA 15:1)

(Electric power)
(Textile industry)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, T., polkovnik

Education of Soviet servicemen during their military training
and drill; advice to lecturers and the leaders of study groups.
Komm. Vooruzh. Sil 2 no.10:57-61 My '62. (MIRA 15:5)
(Military education) (Communist education)

BYCHKOV, V.

School of progressive work methods. Mast.ugl. 4 no.5:10-
13 My '55. (MIRA 8:7)

1. Pomoshchnik nachal'nika uchastka podgotovitel'nykh rabot
shakhty no.3-3bis kombinata Kuzbassugol'
(Kuznetsk Basin--Mining engineering--Study and teaching)

Bychkov, V.

ALEKSANDROV, A.; ATAMALYAN, E.; BYCHKOV, V.; DRUZHKOVA, L.; YELYUTINA, K.; ZAKHAROVA, L.; KOCHETOV, V.; RADYUKIN, M.; SPEKTORSKIY, V.; FEDOT-KIN, I.; POLIMONOV, L.; TSIMBULOV, G.; SHEKOVAN, R.; SHAGIN, M.

Letter to the editor. Neft.khoz. 33 no.6:92 D '55. (MIRA 9:8)
(Oil well drilling--Equipment and supplies)

BARDIN, I.; BELAN, R.; BEKHTIN, N.; BOYKO, V.; BORISOV, A.; BYCHKOV, V.;
VASILENKO, S.; VINOGRADOV, V.; VISHNEVSKIY, A.; VODNEV, G.; DVORIN,
S.; DZHAPARIDZE, Ye.; DIDENKO, V.; D'YAKONOV, N.; ZHURAVLEV, S.;
ZAKHAROV, A.; IVANOV, I.; KIRSANOV, M.; KOLYADA, G.; KOROBOV, P.;
LINSKOV, A.; LUKICH, L.; LYUBIMOV, A.; MELESHKIN, S.; MYRTSYMOV, A.;
PERTSEV, M.; PETRUSHA, F.; PITERSKIY, A.; POPOV, I.; RAYZER, D.;
ROZHKOV, A.; SAPOZHNIKOV, L.; SEDOV, P.; SOKOLOV, P.; TEVOSYAN, I.;
TIKHONOV, N.; TISHCHENKO, S.; FILIPPOV, B.; FOMENKO, N.; SHELKOV,
A.; SHEREMET'YEV, A.

Fedor Aleksandrovich Merkulov. Koks i khim.no.7:62 '56. (MLRA 9:12)
(Merkulov, Fedor Aleksandrovich, 1900-1956)

BYCHKOV, V.

Attachment with power supply from the network. Radio no 3:36-37
Mr '61. (MITA 14:8)

(Voltohmmeter) (Voltmeter)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

PROSEKOV, E. (Moskva); BUDENKO, A. (Moskva); BYCHKOV, V. (Moskva)

Transistorized voltage stabilizers. Radio no. 9343-46 S '64.
(MIRA 17:12)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, V.; KRUPNIK, M.

Do you want information? Here it is! Zhil.-kom.khoz. 12 no.7:
32-33 Jl '62. (MIRA 16:5)

1. Upravlyayushchiy Leningradskoy gorodskoy spravochno-informatsionnoy kontoroy (for Bychkov). 2. Zaveduyushchiy gazetno-zhurnal'nym otdelom Leningradskoy gorodskoy spravochno-informatsionnoy kontory (for Krupnik).

(Information services)

1-1

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, V.

Measure which should be welcomed. Den. i kred. 21 no.6:28-29
Je '63. (MIRA 16:8)
(Credit) (Payment)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

BYCHKOV, V.A. (Vologda).

Brief calendar of events in physics in 1947. Fiz. v shkole 7 no.3:
41-45 '53.
(MLRA 6:11)
(Physics) (Anniversary calendar)

LEBEDEV, V.V.; BYCHKOV, V.A.

New machines, mechanisms, and appliances. Elek. i tepl.
tiaga 3 no.11:11-13 N '59. (MIR 13:3)

1. Nachal'nik lokomotivnogo depo Sverdlovsk-Sortirovochnyy
(for Lebedev). 2. Nachal'nik proizvodstvenno-tehnicheskogo
otdela lokomotivnogo depo Sverdlovsk-Sortirovochnyy (for
Bychkov).

(Railroads--Tools and implements)

BYCHKOV, V.A.; DOROFEEV, S.V. [deceased]

Behavior of old fur seal bulls during the harem period. Zool.
zhur. 41 no.9:1433-1435 S '62. (MIRA 15:11)

1. All-Union Research Institute of Marine Fishery Management
and Oceanography, Moscow.
(Tuleniy Island--Seals (Animals))

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, V.A.

Autumn molting in seals. Biul. MOIP. Otd. biol. '70 no.2:113-118
Mr-Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

ROSIN, G. S.; BYCHKOV, V. F.

Vibrometer for measuring the dynamic moduli of elasticity of soundproof and vibration-absorbing materials. Zav. lab. 28 no.12:1518 '62. (MIRA 16:1)

1. Ural'skiy filial Akademii stroitel'stva i arkhitektury SSSR.

(Testing machines) (Elasticity)

ACC NR: AT7000406

SOURCE CODE: UR/2667/66/000/0402/0155/0157

AUTHOR: Bychkov, V. G.

ORG: None

TITLE: Testing of a quinone iodide intensifier on Mikrat-300 film (Preliminary results)

SOURCE: Moscow. Nauchno-issledovatel'skiy institut aeroklimatologii. Trudy, no. 42 (2). Voprosy prikladnoy klimatologii Zapadnoy Sibiri (Problems of applied climatology of Western Siberia), 155-157

TOPIC TAGS: quinone, film processing, photographic film, microfilm, sensitivity increase, hydrometeorology, image intensifier

ABSTRACT: The preliminary findings of experimentation in the use of a quinone iodide intensifier on Mikrat-300 film are reported. Mikrat-300 is used for micro-filming hydrometeorological data. The methods used to construct characteristic curves from sensitograms, which were obtained both before and after intensification, are presented. Conclusions concerning the practical value of this intensifier in exposing weak images on Mikrat-300 film are discussed in brief. Orig. art. has 1 figure.

SUB CODE: 14/SUBM DATE: None/ORIG REF: 002

Card 1/1

LEONOV, P.I.; BYCHKOV, V.I.

Work and prospects of the local industry of Moscow. Gor.khoz.Mosk. 31
no.5:1-6 My '57. (MIRA 12:3)

1. Zamestitel' predsedatelya Ispolkoma Mossoveta (for Leonov). 2. Glavnyy inzhener Glavnogo upravleniya mestnoy promyshlennosti Mosgorispolkoma (for Bychkov).

(Moscow--Industries)

BYCHKOV, V.I.

Soil erosion in forest-steppe regions of the Angara
Valley. Pochvovedenie no.8:53-61 Ag '60.
(MIRA 13:8)

1. Vostochno-Sibirskiy filial Akademii nauk SSSR.
(Angara Valley---Erosion)

BYCHKOV, V.I.

Line erosion in the northern part of the Ust'-Orda Buryat National Area, Irkutsk Province. Izv. Sib. otd. AN SSSR no. 3:90-97 '61.
(MIRA 14:5)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR,
Irkutsk.

(Ust'-Orda—Erosion)

BYCHKOV, V.I. (Moskva)

"Reorganization of the district unit in the rural public health system." Fel'd i akush. 23 no.9:64 S'58
(PUBLIC HEALTH, RURAL) (MIRA 11:10)

BYCHKOV, V.I., GANZEN, S.I.

Primary cancer of the vermiform process with metastases to the
uterus and fallopian tubes. Akush. i gin. 36 no.3:111-112 My-Je
'60. (MIRA 13:12)

(UTERUS--CANCER) (FALLOPIAN TUBES--CANCER)
(APPENDIX-CANCER)

BYCHKOV, V.I.

On hyaline membranes in the lungs of newborn infants. Akush.i
gin. 36 no. 5:56-62 S-0 '60. (MIRA 13&11)

1. Iz patomorfologicheskoy laboratorii (zav. - prof. Ye.N. Petrova)
Instituta akusherstva i ginekologii (dir. - doktor med.nauk O.V.
Makeyeva) Ministerstva zdravookhraneniya RSFSR.
(LUNGS--DISEASES) (INFANTS (NEWBORN)--DISEASES)

KLEBANOV, F.G.; BYCHKOV, V.I.

Reaction of the peritoneum to talc. Khirurgiia 37 no.2:115-118
F '61. (MIRA 14:1)

1. Iz Moskovskoy gorodskoy bol'nitsy No.56 (glavnnyy vrach
A.A. Kolomeytseva).
(PERITONEUM--DISEASES) (TALC)

BYCHKOV, V.I.

Tuberculous endometritis. Sov.med. 25 no.6:131-135 Je '61.
(MIRA 15:1)
1. Iz Instituta akusherstva i ginekologii (dir. - dotsent L.G.Stepanov)
Ministerstva zdravookhraneniya RSFSR.
(ENDOMETRIUM TUBERCULOSIS)

BYCHKOV, V.I.; GOLUBOVICH, G.M.

Mechanization of enterprises of the metalworking industry. Gor.
khoz. Mosk. 35 no.11:44-47 N '61. (MIRA 16:7)

1. Glavnnyy inzh. Upravleniya metalloobrabatyvayushchey
promyshlennosti Moskovskogo gorodskogo ispolnitel'nogo komiteta
Moskovskogo gorodskogo Soveta deputatov trudyashchikhsya (for
Bychkov). 2. Nachal'nik tekhnicheskogo otdela Upravleniya metallo-
obrabatyvayushchey promyshlennosti Moskovskogo gorodskogo
Soveta deputatov trudyashchikhsya (for Golubovich).
(Moscow--Metalworking machinery)

BYCHKOV, V.I.

Cilioepithelial cytomas of the ovaries. Sov.med. 26 no.7:111-114
Jl '62. (MIRA 15:11)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i
ginekologii (dir. - prof. O.V. Makeyeva) Ministerstva zdravo-
okhraneniya RSFSR.

(OVARIES--TUMORS)

BYCHKOV, V.I.

Ovarian adenofibroma. Akush. i gin. 40 no.4:139-142 J1-Ag '64.
(MIRA 18:4)

1. Nauchno-issledovatel'skiy institut akusherstva i ginekologii
(dir. - prof. O.V. Makeyeva) Ministerstva zdravookhraneniya SSSR,
Moskva.

YERMINA, M.S., kand.med.nauk; BYCHKOV, V.I., kand.med.nauk

Tuberculous endometritis and the results of its treatment.
Probl. tub. no.2:58-63 '65.

(MIRA 18:12)

l. Nauchno-issledovatel'skiy institut akusherstva i gine-
kologii (direktor - prof. O.V. Makeyeva) Ministerstva
zdravookhraneniya SSSR.

GOBERMAN, Grigoriy Yefimovich; BYCHKOV, Vasiliy Ivanovich; SLOVESNIKOV,
A.M., red.; GORBATKIN, B.G., tekhn. red.

[Locks and hardware] Zamki i skobianye pribory. Moskva, Gos-
mestpromizdat, 1962. 166 p. (MIRA 16:4)
(Locks and keys) (Hardware)

BYCHKOV, Vladimir Konstantinovich; KIRAKOZOVA, N.Sh., red.; BRODSKIY, M.P.,
tekhn. red.

[Czechoslovak method of pattern design and cutting of men's clothing] Chekhoslovatskaia sistema kroia muzhskoi odezhdy. Moskva, Gos.
izd-vo torg.lit-ry, 1961. 134 p. (MIRA 14:12)
(Czechoslovakia—Garment cutting)

SHARUN, V.G., inzh.; BYCHKOV, V.N.

Dust-mask maintenance in mines. Bezop. truda v prom. 6 no.3:10
Mr '62. (MIRA 15:3)
(Krivoi Rog Basin—Mine dusts—Safety measures)

RAMZAYEV, P.V.; NEGUREY, A.P.; BYCHKOV, V.P. (Leningrad)

Thermoelectric method for the determination of basal metabolism.
Probl.endok. i gorm. 5 no.3:80-87 My-Je '59. (MIRA 12:9)

1. Iz bol'nitsy imeni V.V.Kuybysheva (glavnyy vrach Ye.V.
Mamysheva) i kafedra gigiyeny Voyenno-meditsinskoy ordena
Lenina akademii imeni S.M.Kirova (nach. - prof.P.Ye.Kalmykov).
(BASAL METABOLISM, determ.
thermoelectric method (Rus))

BYCHKOV, V. P.; RAMZAYEV, P. V. (Leningrad)

Skin temperature and the correlation of the modes of heat loss,
objective criteria of the boundary between comfort and overheating.
Gig. truda i prof. zab. no.12:3-7 '61. (MIRA 14:12)

1. Voyenno-meditsinskiy muzey Ministerstva oborony SSSR, Voyenno-meditsinskaya ordena Lenina akademiya imeni S. M. Kirova.

(BODY TEMPERATURE) (PERSPIRATION)

AKHLEBININSKIY, K.S.; BYCHKOV, V.P.; IL'INA, I.A.; KONDRAT'YEV, Yu.I.;
USHAKOV, A.S.

Providing the crew of a spaceship with food of animal origin.
Probl.kosm.biol. 1:145-151 '62. (MIRA 15:12)
(ASTRONAUTS--NUTRITION)

BYCHKOV, V. P.

158T32

USSR/Electricity - Motors, Electric
Regulators, Speed

Feb 50

"DC Drive of Large Range for Regulating the Rotary
Speed of an Electrical Motor," V. P. Bychkov, Moscow
Power Eng Inst imeni Molotov, 9 pp

"Iz Ak Nauk SSSR Otdel Tekh Nauk" No 2-~~167-75~~

Concludes systems containing DC electric drive with elec-
tric motor regulator in bridge circuit can insure wide
range of regulation for speed of rotation of motor,
limited only by hysteresis in regulator. Ordinary DC
motor can be used as regulator after appropriate re-
winding of poles, but should have low hysteresis loss.
Submitted 30 Jul 49 by Acad V. S. Kulebakin.

158T32

BYCHKOV, V. P.

PA 171T14

USSR/Electricity - Transients
Motors

Mar 50

"Transition Processes of an Independently Excited Motor With Varying Flux and Voltage," V. P. Bychkov, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 3, pp 44-46

Proposes graphoanalytical method for calculating processes. Method enables to construct, with sufficient accuracy, curves of these processes when resistance in motor excitation circuit is changed and with varying voltage on motor armature. Submitted 20 Sep 49.

171T14

BYCHKOV, V. P.

USSR/Electricity - Motor-Generator Sets

Transients

Jun 51

"Transients in a Motor-Generator System in which
the Motor Has a Limiting Mechanical Character-
istic," Docent V. P. Bychkov, Cand Tech Sci,
Moscow

"Elektriches'tvo" No 6, pp 29-37

Examines transients occurring in the starting of
the motor of a motor-generator system, the gen-
erator of which has 3 exciting windings. Sug-
gests method of calcg transients, and analyzes

200113

USSR/Electricity - Motor-Generators

Jun 51
(Contd)

the effect of the various parameters of the
generator's excitation circuit and of the
nonlinearity of its magnetic circuit on the
transient process. Submitted 28 Jul 50.

200113

BYCHKOV, V. P.

PA 228T51

USSR/Electricity - Motor-Generator Sets Apr 52
Amplidynes

"A Quadratic System Using An Amplidyne," Docent
V. P. Bychkov, Cand Tech Sci, Moscow

"Elektrichestvo" No 4, pp 32-38

Analyzes the effect of the parameters of an
amplidyne with crit self-excitation in a quadratic
motor-generator system upon the flexibility of the
mech characteristic and the stability. Gives a
method for calcg the parameters of the amplidyne
exciting circuits.

228T51

SOV/112-59-4-6994

8(0)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 81 (USSR)

AUTHOR: Bychkov, V. P.

TITLE: Normal Induction Motors Fed by a Higher Frequency

PERIODICAL: Sb. stately vses. zaochn. politekhn. in-ta, 1957, Nr 18, pp 88-103

ABSTRACT: Use of normal-make induction motors supplied by a higher frequency, without altering their windings, is considered. Influence of the frequency and applied voltage upon the motor overload capacity, starting torque, losses, and temperature rise is investigated. This relation

$$\alpha = \beta \sqrt{(1+K) / \left(K \frac{\lambda_n}{\lambda} \cdot \frac{\lambda_n + \sqrt{\lambda_n^2 - 1}}{\lambda + \sqrt{\lambda^2 - 1}} + \beta \frac{78.6 + f}{78.6 + f_n} \right)}$$

Card 1/2

SOV/112-59-4-6994

Normal Induction Motors Fed by a Higher Frequency

permits determining the value of motor supply voltage $U = \alpha U_n$ at which, for the specified frequency $f = \beta f_n$ and the specified overload capacity λ , the motor will have a permissible heating (subscript n means rated values); K is the copper-loss/iron-loss ratio, λ_n is the motor overload capacity at rated voltage and frequency. It is stated that the maximum frequency, or the highest motor rpm, is primarily limited not by the growing losses, but by the dwindling starting torque of the motor.

I.M.S.

Card 2/2

28(1)

PHASE I BOOK EXPLOITATION

SOV/2629

Bychkov, Vasiliy Pavlovich

Teoriya avtomaticheskogo regulirovaniya i regulatory. Lektsiya 2.
Elementy sistem avtomaticheskogo regulirovaniya (Theory of
Automatic Control and Control Equipment. Lecture 2. Components
of Automatic Control Systems) Moscow, 1958. 53 p. 1,000 copies
printed.

Sponsoring Agency: Vsesoyuznyy zaochnyy politekhnicheskiy institut.
Kafedra elektricheskikh mashin i apparatov.

Resp. Ed.: S. A. Pogozheyev, Professor; Ed. of Publishing House:
I. V. Goncharova; Tech. Ed.: P. G. Bobrov.

PURPOSE: This is a textbook for students in the Department of
Power Engineering of the All-union Correspondence Polytechnical
Institute studying electrical equipment for industry and elec-
trical machines.

COVERAGE: This booklet presents Lecture No. 2 on the theory of
automatic control and control equipment and the elements of auto-
Card 1/3

Theory of Automatic Control (Cont.)

SOV/2629

matic control systems. The author classifies these elements according to function and according to the transient processes occurring in an element of the automatic control system when a standard disturbance is applied at its input. The author considers the two-stage analysis of static and dynamic characteristics of an automatic control system to be the basis for the system's design. No personalities are mentioned. There are 3 references, all Soviet.

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Theory of Automatic Control (Cont.)

SOV/2629

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AVAILABLE: Library of Congress (TK2851.B9)
Card 3/31/4/60
JP-ec

SIROTIN, Artemiy Afanas'yevich; BARASHIN, A.V., prof., retsenzent;
KHALIZEV, G.P., dotsent, retsenzent; KASPERZHAK, G.M., dotsent,
retsenzent; BYCHKOV, V.P., dotsent, red.; VORONIN, K.P.,
tekhn.red.

[Automatic control of electric driving equipment] Avtomaticheskoe
upravlenie elektroprivodami. Moskva, Gos.energ.izd-vo, 1959.
526 p.

(MIRA 12:3)

(Electric driving) (Automatic control)

BONDARENKO, Prokofiy Stepanovich; BYCHKOV, V.P., red.; ANTIK, I.V., red.;
VESHENEVSKIY, S.P., red.; KULEBAКIN, V.S., red.; SMIRNOV, A.D.,
red.; SOTSKOV, B.S., red.; STEPANI, Ye.P., red.; SHUMILOVSKIY,
N.N., red.; BYCHKOV, V.P., red.; VORONIN, K.P., tekhn.red.

[Automatic control of blast-furnace processes by means of
computers] Avtomatizatsiya protsessov domennogo proizvodstva
s primeneniem schetno-reshaiushchikh ustroistv. Moskva, Gos.
energ.izd-vo, 1960. 143 p. (Biblioteka po avtomatike, no.20)

(Blast furnaces)

(Automation)

(MIRA 14:3)

GOLOVACH, Aleksandr Fedorovich; BYCHKOV, V.P., red.; SARMATSKAYA, G.I.,
red. izd-va; PARAKHINA, N.L., tekhn. red.

[Electric power equipment for woodworking industries] Elektrosilovoe
oborudovanie derevoobrabatyvaiushchikh predpriatii. Moskva, Gosles-
bumizdat, 1960. 307 p.
(Woodworking industries) (Electric machinery) (MIRA 14:10)

S/865/62/002/000/005/042
D405/D301

AUTHORS:

Ushakov, A.S. and Bychkov, V.P.

TITLE:

Nutritional problems of space flight

SOURCE:

Problemy kosmicheskoy biologii. v. 2. Ed. by N. Sisakyan and V. Yazdovskiy. Moscow, Izd-vo AN SSSR, 1962, 48-53

TEXT:

The nutritional problem of long space flights (from 6 months to several years) is considered. In this case the nutrition of the astronauts can be ensured only by a closed nutritional cycle in the space ship cabin. Unicellular algae are generally considered as the main component of such a closed nutritional cycle. Chlorella-type algae were studied in more detail in the literature; a study of various other types of unicellular algae as possible sources of food on space ships and of methods of meal preparation from such sources is necessary. The nutritional requirements of astronauts with regard to animal fats and protein could be met by including in the food cycle various types of animals, from nonvertebrates (zoo-

Card 1/2

Nutritional problems ...

S/865/62/002/000/005/042
D405/D301

plankton) to higher vertebrates. Among the latter, hens are to be preferred; the hens themselves can be fed by unicellular algae, zooplankton, etc.; egg incubation would ensure continuity of the hen species (in case the mother hens would perish). Ducks and rabbits present similar advantages as hens. The use of zooplankton is limited at present by the large volume of water such cultures require; further studies are required in this direction. The carbohydrates in the astronaut's diet can be provided by cultivating crops of higher plants on the space ship; thereby no soil would be used, but artificial mixtures, thus saving starting-weight and enabling crop control. In conclusion, the creation of a closed nutritional cycle on board space ships for prolonged flights, presupposes research on optimal types of unicellular algae, higher plants, zooplankton, and animals, and the development of methods of their cultivation, storing and multiplication on board space ships.

Card 2/2

BYCHKOV, V.P., kand.tekhn.nauk, dotsent; IL'IN, V.I., strkh.; KATSEVICH, V.I.,
inzh.

Method for limiting current in the start of the main motor of a
roughing mill. Elektrichestvo no.11:72-74 N 164.

1. Moskovskiy energeticheskiy institut.

(MIRA 18:2)

BYCHKOV, V.P., kand. tekhn. nauk.; IL'IN, V.I., inzh.; KATSEVICH, V.L., inzh.

Methods for measuring current components of a motor with armature voltage control. Elektrotehnika 35 no.10:62-63 O '64.

(MIRA 17:11)

ABAKUMOVA, I.A.; AKEBININSKIY, K.S.; BYCHKOV, V.P.; DEMOCHKINA, N.G.;
KONDRAT'YEV, Yu.I.; USHAKOV, A.S.

Some data on a group of animals in a closed ecologic system.
Probl. kosm. biol. 4:107-118 '65. (MIRA 18:9)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9

BYCHKOV, V.P., kand.tekhn.nauk

Transient processes during shock applied loads. Elektrotehnika
36 no.11:14-17 N '65.

(MIRA 18:11)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307830001-9"

L 14263-66 EWT(1)/FS(v)-3 SCTB DD/RD
ACC NR: AT6003846 SOURCE CODE: UR/2865/65/004/000/0107/0118

AUTHOR: Abakumova, I. A.; Akhlebininskiy, K. S.; Bychkov, V. P.; Demochkina, N. G.;
Kondrat'yev, Yu. I.; Ushakov, A. S.

ORG: none

TITLE: Some data on the animal link in a closed ecological system

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii,
v. 4, 1965, 107-118

TOPIC TAGS: closed ecology system, space nutrition, commercial animal, animal
husbandry

ABSTRACT: Data on the animal part of a closed ecological system such as might
be used in spaceflight (based on unicellular algae, higher plants, animals,
and man) are presented. Most of the information concerns chickens and
ducks, good choices because they mature fast, produce a sufficient quantity
of nutritious food, and have a high yield of meat and eggs per unit of feed.
Comparative analysis shows that to produce 1 kg of meat and fat, cattle
require approximately twice as much feed, and pigs 1.5 times as much

Card 1/3

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B+1

L 14263-66
ACC NR: AT6003846

feed as broiler chickens. Furthermore, new generations of chickens and ducks are easily raised by incubating fertilized eggs, and their offspring (taken together) weigh more than the offspring of other animals. The meat of chickens and ducks has more protein and is of higher food value than the protein of other animals. Calculations are made of the number of ducks required to provide a cosmonaut with his daily requirement of animal protein (40-45 g), and tables showing turnover of the flock are listed. For instance, it was concluded that 9 Peking ducks (40 days old) will feed a cosmonaut for 1 month. Fifty eggs are needed for food and hatching in the same period. The daily food and water requirement for this duck population is computed, together with the amount of respired CO₂. Analogous comparative data are listed for chickens. Charts of the nutritive content and caloric value of the food produced by chickens and ducks are included.

It is calculated that for 1 kcal of this food, 25.4 kcal of feed is expended for a duck, and 22.2 kcal for a chicken. Of course, the needs of other links in the closed system will determine whether chickens or ducks are finally chosen. Both animals have advantages: ducks, for instance, can be fed a

Card 2/3

L 14263-66
ACC NR: AT6003846

higher percentage of green fodder, and they both mature and gain weight faster than chickens. It must be emphasized that these are only preliminary calculations. More information must be collected about these and other animals, and many experiments must be conducted with each in a closed ecological system. Orig. art. has: 9 tables. [ATD PRESS: 4091-F]

SUB CODE: 02, 06 / SUBM DATE: none / ORIG REF: 013 / OTH REF: 002

Card 3/3 *Sc*

L 45964-66 JXT(CZ)/GD/RD
ACC NR: AT6030694

SOURCE CODE: UR/0000/66/000/000/0023/0028

AUTHOR: Bychkov, V. P.; Boyko, N. N.; Kasatkina, A. G.; Kondrat'yev, Yu. I.;
Ushakov, A. S.

ORG: none

33
B+1

TITLE: The possibility of using dehydrated products in cosmonaut diets

SOURCE: Konferentsiya po kosmicheskoy biologii i meditsine, 1964. Materialy. Moscow,
Inst. mediko-biol. problem, 1966, 23-28

TOPIC TAGS: space biology, space food, human physiology, nutrition, biologic metabolism

ABSTRACT: Experiments were conducted to study the effects of dehydrated food rations on human metabolism. Freeze-dried and heat-dried food products were used to make up three different rations, with caloric values from 2117 to 2974 kcal. The food was eaten dry, but could be washed down with unlimited amounts of water. Among the foods used were freeze-dried meat products (pork and beef sausage, beef roll, ham and smoked pork), dried milk products (a 5:5:11:1 mixture of cream, walnuts, milk, and sugar, and a 5:5:1 mixture of pot cheese, cream, and sugar) and candy and pastry, (vitaminized caramels, lemon drops, etc). Biomedical monitoring of the six healthy subjects was conducted throughout the experiment, and each subject kept a medical journal. In the first test, laboratory workers were fed normally

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for 10 days, and then for 20 days ate equivalent amounts of the same foods, dried, (Ration No. 1, see Table 1) while performing their normal tasks. In the second test

Table 1. Weight, chemical composition, and caloric value of food rations

Number of ration	Weight in g	Moisture in g	Protein in g	Fat in g	Carbohydrate in g	Ash in g	Caloric value in kcal
1	609	43.4	112.3	93.2	339.0	21.1	2117
2	638	34.4	118.1	111.4	354.7	19.40	2974
3	615	51.6	107.8	106.6	326.1	22.90	2770

one subject was fed Ration No. 2 and water regenerated from urine for 35 days. He remained in a small chamber (7 m^3), where normal atmospheric and microclimatic conditions were maintained; his day was divided into sleep (8 hr), exercise (35–40 min), meals (three per day), and drafting work and reading (specially selected literature). In the third test two subjects stayed in a similar chamber for 33 days, during which time they were fed Ration No. 3 for 22 days and normal food in the 11 days before and after. One received water regenerated from urine and the other distilled water. The system of biosensors was also tested in this experiment. In addition to sleep and exercise periods (8 hr and 35–40 min, respectively), and meals, the subjects' time was occupied in recording physiological functions using the sensors.

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Medical journals of all subjects showed that the dehydrated rations were completely consumed, and that the appetite and general well-being of the subjects remained good. No differences were noted between the regenerated and distilled water. Weight fluctuations showed individual differences, since two subjects eating Ration No.1 lost weight and one gained. Water consumption and urine excretion were normal, although daily diuresis decreased somewhat during the experimental period. Assimilation of proteins and fats decreased during feeding with the test rations, while carbohydrate assimilation was unchanged. The slightly negative nitrogen balance observed in the younger, heavier subjects fed Ration No.3 indicates an insufficient amount of protein for their needs and points up the necessity for individual tailoring of food rations. In general, physiological indices monitored did not exceed normal limits. It was concluded that the rations tested can serve as the basis for a month-long cosmonaut diet. Orig. art. has: 4 tables.

[JS]

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SOURCE CODE: UR/0244/66/025/006/0009/0014

AUTHOR: Kondrat'yev, Yu. I. (Moscow); Bychkov, V. P. (Moscow); Ushakov, A. S. (Moscow); Boyko, N. N. (Moscow); Klyushkina, N. S. (Moscow); Abaturova, Ye. A. (Moscow); Terpilovskiy, A. M. (Moscow); Korneyeva, N. A. (Moscow); Belyakova, M. I. (Moscow); Kasatkina, A. G. (Moscow)

ORG: none

TITLE: The use of 50 and 100 g of dry unicellular algae in human food rations

SOURCE: Voprosy pitaniya, v. 25, no. 6, 1966, 9-14

TOPIC TAGS: food chemistry, algae, biologic metabolism, nutrition, human physiology, FOOD RATION

ABSTRACT: The effect of a diet containing the addition of 50 g of dry unicellular algae (a mixture of Chlorella pyrenoidosa and Scenedesmus quadricauda) on several metabolic indices was studied in three volunteers for 23 days. A ration containing an additional 100 g of the same biomass was given to four other volunteers for 22 days. The following values were determined: in the blood — residual nitrogen, urea, ammonia, cholesterol, phospholipids; in the urine — specific gravity, pH, total nitrogen, urea, ammonia, creatine, creatinine, amino-acid nitrogen,

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ACC NR: AP7002685

17-21-dioxy-20-ketocorticosteroids; in the feces — total nitrogen, fat, ash, and carbohydrates. Daily water intake and diuresis were calculated. Analysis of the data obtained showed that the metabolic indices investigated changed insignificantly in comparison with control data (with the exception of lipid metabolism data) and remained within physiologically normal limits. It was concluded that it is possible to include up to 100 g of dry unicellular algae in the human diet over a period of 22 days.

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ATD PRESS: 5113

Card 2/2

ACC NR: AP7002686

SOURCE CODE: UR/0244/66/025/006/0014/0019

AUTHOR: Kondrat'yev, Yu. I. (Moscow); Bychkov, V. P. (Moscow); Ushakov, A. S. (Moscow); Boyko, N. N. (Moscow); Klyushkina, N. S. (Moscow); Abaturova, Ye. A. (Moscow); Terpilovskiy, A. M. (Moscow); Korneyeva, N. V. (Moscow); Belyakova, M. I. (Moscow); Vorob'yeva, Ye. S. (Moscow); Demochkina, N. G. (Moscow); Kasatkina, A. G. (Moscow)

ORG: none

(Moscow)

(Moscow)

(Moscow)

TITLE: The use of 150 g of dry unicellular algae in human good rations

SOURCE: Voprosy pitaniya, v. 25, no. 6, 1966, 14-19

TOPIC TAGS: food chemistry, algae, biologic metabolism, human nutrition, human physiology, FOOD RATION

ABSTRACT: The effect of food rations containing an addition of 150 g of dry unicellular algae (a mixture of Chlorella and Scenedesmus) on human metabolic processes was studied for 20 days in five volunteers. The following values were determined: in blood -- residual nitrogen, urea, ammonia, cholesterol, phospholipids; in the urine -- specific gravity, pH, total nitrogen, urea, ammonia, creatine, amino-acid nitrogen, 17-21-dioxy-20-ketocorticosteroids; in the feces -- total nitrogen, ash, and carbohydrates. Reactions of the subjects to the experimental ration varied from no complaint to inflammation of face and hands, dyspeptic

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UIC. 612 06-0001-1

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: phenomena, etc. These apparently allergic phenomena require further investigation; however, they could be caused by various components of the biomasses of unicellular algae. Inclusion of 150 g of dry unicellular algae in food rations led to some shifts in the state of health in the majority of the subjects, precluding recommendation for its inclusion in human diets for 20 days.

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